THE MINISTER OF STATE IN THE MINISTRY OF AGRICULTURE (SHRI KANTILAL BHURIA): (a) to (c) The Registration Committee constituted under Section 5 of the Insecticides Act, 1968 registers pesticides only after satisfying itself regarding their efficacy and safety. Toxicity and residue data generated under supervised trials is analysed and used to fix Maximum Residue Limits (MRLs) by the Ministry of Health & Family Welfare under the Prevention of Food Adulteration Act, 1954 and Rules framed thereunder. The inspection of fruits and vegetables for the presence of pesticide residues and other harmful substances falls under the purview of the Ministry of Health & Family Welfare. However, as per the directions of the Inter Ministerial Committee constituted to review the use of hazardous chemicals and insecticides, 33 samples of vegetables have been drawn from Agricultural Produce Marketing Committee, Azadpur, Delhi since June, 2006 and tested for residues of organo-chlorine, organo-phosphorus and synthetic pyrethroids pesticides. Residues of chlorpyriphos were detected in two of these samples at the level of 0.18 ppm. 24 of these samples have also been analysed for the presence of heavy metals like lead, cadmium and arsenic. The heavy metals found in the samples of vegetables were below the maximum limit prescribed under the Food Adulteration Rules, 1955.

The Ministry of Agriculture has also taken up a scheme for Monitoring of Pesticide Residues under which 21 laboratories under various Ministries/ Departments have been provided with equipments to undertake analysis of pesticide residues in vegetables, water, meat & meat products, and marine products.

Transgenic crops

1051. SHRIMATI N.P. DURGA:
SHRI DHARAM PAL SABHARWAL:

Will the Minister of AGRICULTURE be pleased to state:

(a) the details of transgenic crops that are in the pipeline to be introduced in the country, apart from Bt. Cotton;

(b) whether food safety and environment risk assessment tests have been carried out on the above transgenic crops which are going to be introduced into the country;

(c) if so, the details on (a) and (b) above; and

(d) the measures taken or proposed to be taken to strengthen transgenic research programme in the country?

THE MINISTER OF STATE IN THE MINISTRY OF AGRICULTURE (SHRI KANTILAL BHURIA): (a) to (c) The Department of Biotechnology, Government of India is the nodal department for biotechnology research including transgenic crops. Apart from Bt. Cotton, field trials on the transgenic crops *viz.* brinjal, cabbage, castor, cauliflower, corn, groundnut, mustard, okra potato, rice and tomato are being conducted during 2006 for experimental purposes. No food safety and environmental risks assessment tests have so far been carried out on the said transgenic crops.

(d) The following measures have been taken by Government of India to strengthen transgenic research programme in the country:—

(I) The biosafety regulatory system has been strengthened through Institutional Biosafety Committees (IBSCs) and Review Committee on Genetic Manipulation (RCGM) under the provision of Environment (Protection) Act, 1986 in the Department of Biotechnology.

(II) Network Project on Transgenics: Indian Council of Agricultural Research (ICAR) has sanctioned a new project titled "Transgenics in Crops" to intensify research on development of transgenics to increase yield and quality in 14 crops involving 20 ICAR institutes during the remaining two years of Tenth Five Year Plan (2005-2006 to 2006-2007) with an outlay of Rs. 32.85 crores.

The project has following two main components:—

(a) Functional Genomics: For identification of new genes and DNA markers for agronomically important traits in rice, wheat, maize, chickpea, mustard, tomato and banana;

(b) Development of transgenics for insect and virus resistance in rice, maize, sorghum, chickpea, soyabean, brassica, cotton, pegionpea, potato, tomato, papaya, cassava, brinjal, banana.

(III) Network Project on Molecular Breeding:—Network Project on Molecular Breeding has been sanctioned with an outlay of Rs. 2.41 crores (approx.) for three years duration from A.P. Cess Fund. The

Network on Molecular Breeding comprises 14 sub-projects on 11 field and horticultural crops; rice, wheat, maize, sorghum, pigeonpea, soyabean, potato, banana, grapes, tomato and sugarcane. The institutes identified to implement the sub-projects are IARI, New Delhi; NRC PB, New Delhi; DMR, New Delhi; CRRI, Cuttack; IIPR, Kanpur; NRC Soyabean, Indore; NRC Sorghum, Hyderabad; CPRI, Shimla, IIVR, Varanasi, NRCG, Pune; IIHR, Bangalore and SBI, Coimbatore.

The sub-project objectives are categorized under three broad thematic areas:—

(a) Gene Tagging/Mapping Oligogenic Traits

(b) Quantitative Traits Locus (QTL) Mapping

(c) Marker-Assisted Breeding

(IV) Network Project on Gene Pyramiding for Resistance to Multiple Biotic Stress in Crops : The above project has been sanctioned for a total amount of Rs. 1,95,26,350/-. The project involving 12 centres on five crops *viz.* Rice, Wheat, Maize, Chickpea, Tomato and Oilseed crops. In case of crops the focus will be for pyramiding genes.

The project aims at following objectives:—

(a) To validate the molecular markers linked to targeted disease/ insect-pest resistance gene(s) in the selected crops (rice, wheat, maize, chickpea and tomato and oilseed crops).

(b) To pyramid the targeted disease/insect-pest resistance genes in the genetic background of the elite cultivars of the selected crops through molecular marker-assisted foreground and background selections.

(c) To develop advanced breeding lines in the target crops possessing the resistance genes in various combinations for use as donors in breeding programmes;

(d) To evaluate the gene pyramided lines under field conditions at various test locations.

The duration of the project is for three years (2005-2008).

Crop-wise targeted genes, crops and centres involved in Sub-projects are:

i. Pyramiding genes in rice for resistance to bacterial leaf blight,blast and gall midge (DRR, Hyderabad; CRRI, Cuttack and IARI, New Delhi).

ii. Pyramiding genes for resistance to leaf rust and stripe rust in Wheat (DWR, Karnal; IARI, New Delhi; PAU, Ludhiana, DWR-RS, Shimla and IARI-RS Wellington).

iii. Pyramiding genes for resistance to Polysora rust and Turcicum leaf blight in Maize (DMR, New Delhi; IARI, New Delhi; UAS-ARS, Nagenahalli and VPKAS, Almora)

iv. Pyramiding genes for resistance to Fusarium Wilt in chickpea (IIPR, Kanpur).

v. Pyramiding genes for resistance to Tomato Yellow Curl Virus (TYLCV) in tomato (IIVR, Varanasi).

Status of horticulture production

1052. SHRI MATILAL SARKAR: Will the Minister of AGRICULTURE be pleased to state:

(a) the status of horticulture production in each State and Union Territory and also the position in the whole country during 2004-05, 2005-06 and 2006-07;

(b) whether horti-produces are in the increasing or in the decreasing stand during the last five years;

(c) the percentage of horti-produces being processed; and

(d) the steps taken to increase processing to a substantial degree?

THE MINISTER OF STATE IN THE MINISTRY OF AGRICULTURE (SHRI KANTILAL BHURIA): (a) Horticulture Production data for each State and Union Territory and also at all India level for the years 2004-05, 2005-06 and 2006-07 are given in the Statement attached (*See* below).

(b) Horti-produces are in the increasing stand during the last five years.

(c) The Percentage of fruits and vegetables for processing is estimated to be around 2.20% of the total production.

(d) The Ministry of Food Processing Industries, under its plan schemes provides financial assistance up to 25% of the cost of plant & machinery